FILED: JANUARY 9, 2004

**REMARKS** 

Status of the Claims

With the cancellation of Claims 30-57 in the paper mailed May 9, 2005, Claims 1-29 are

currently pending. Claims 1-10, 14-18, 28 and 29 were rejected in the July 19, 2005, Office

Action, and Claims 1, 3, 4, 7-13, 16 and 19-29 were objected to.

Claims 1-18, 21, and 26-29 are currently amended herein, and new Claim 58 is presented.

Support for the amendments are found throughout the specification as indicated, therefore no

new matter is added. Upon entering Claim 58, Claims 1-19 and 58 will be currently pending and

under examination.

Claim Objections

The Patent and Trademark Office ("PTO") objected to Claims 1, 3, 4, 7-13, 16 and 19-29

as follows.

1) Claims 1, 4, 10, 28, and 29 are objected to because of the definitions of  $(X^5)$  and  $(X^6)$ .

Applicants respectfully maintain that, in view of the amendments to these claims, this objection

has been obviated.

2) Claims 1, 4, 28, and 29 are objected to because of the use of the terms "inorganic

group" and "organometallic group." Applicants amended Claims 1, 4, 28, and 29 to recite

specific substituents as disclosed in the specification (page 29, lines 21-28), in place of these

terms. In view of the amendments to these claims, Applicants respectfully maintain that this

objection has been obviated.

3) Dependent Claim 3 is objected to for reciting a phrase that already appears in the

claim from which Claim 3 depends. Applicants respectfully maintain that, in view of the

amendment to this claim, this objection has been obviated.

4) Claims 7-9 and 11-13 are objected to for using "or any combination of" in reference

to the first metallocene and the second metallocene. Applicants amended Claims 1, 4, 5-13, 21,

26, 28, and 29 to recite "at least one" first metallocene or "at least one" second metallocene.

Support for this amendment is found in the specification at page 18, lines 14-21. Applicants

22 of 26

AMENDMENT AND RESPONSE TO OFFICE ACTION DATED JULY 19, 2005

U.S. SERIAL NO.: 10/755,083

FILED: JANUARY 9, 2004

respectfully maintain that, in view of the amendments to these claims, this objection has been

obviated.

5) Claim 16 is objected to for reciting a solid oxide component further comprising zinc-

impregnated solid oxides. Respectfully, Applicants note that this reading is not accurate. Claim

16 in fact recites the at least one chemically-treated solid oxide further comprises a metal or

metal ion and is selected from zinc-impregnated chlorided alumina, and the like.

To render this claim more clear, Applicants have recited the specific metal-impregnated

treated solid oxides in new Claim 58, and deleted these specific materials from Claim 16 as

indicated. Applicants respectfully maintain that, in view of the amendment to this claim, this

objection has been obviated.

6) Claims 19, 20, 23-25, and 27 are objected to because of the phrase "further

comprising an optional". Applicants respectfully maintain that, in view of the amendments to

these claims, this objection has been obviated.

7) Claim 27 is objected to because of the nomenclature errors noted in paragraph 8 of the

July 19, 2005, Office Action. Applicants respectfully maintain that, in view of the amendment to

this claim, this objection has been obviated.

Rejection Under 35 U.S.C. § 102(e)

Claims 1-10, 14-18, 28 and 29 were rejected under 35 U.S.C. § 102(e) as being

anticipated by U.S. Patent No. 6,667,274 to Hawley et al. ("Hawley"). Apparently, it is the

position of the PTO that *Hawley* discloses a catalyst composition (col. 2 and Claims 1-10)

consisting of the contact product of at least one organometallic component, at least one

organoaluminum component, and at least one solid oxide treated with an electron-withdrawing

anion, and this disclosure anticipates Applicants' claimed invention. Respectfully, Applicants

traverse this rejection as follows.

According to MPEP 2131:

"A claim is anticipated only if each and every element as set forth in the claim is

found, either expressly or inherently described, in a single prior art reference."

Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d

23 of 26

AMENDMENT AND RESPONSE TO OFFICE ACTION DATED JULY 19, 2005

U.S. SERIAL NO.: 10/755,083 FILED: JANUARY 9, 2004

1051, 1053 (Fed. Cir. 1987). . . . "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Respectfully, Applicants maintain that: 1) "each and every element as set forth in the claim" is not found in the *Hawley*; 2) the "identical invention" is not shown "in as complete detail" in *Hawley* as in Applicants' claims; and 3) the elements in *Hawley* are not "arranged as required by the [Applicants'] claim;" for the following reasons.

Hawley discloses a catalyst composition employing a <u>single</u> metallocene (Tables I and II and Examples) in which the metallocene contains a bridging group consisting of one, two, or three connecting atoms (col. 8, lines 9-11). Although Hawley discloses a process of contacting a catalyst precursor (col. 1, line 64-col. 2, line 9) with "at least one organometal compound," Hawley provides no guidance or teaching whatsoever of preparing a catalyst composition using a first metallocene from a first genus, and then using a second metallocene from a second genus that has no overlap whatsoever with the first genus. Even if one of ordinary skill wanted to select a second metallocene from Hawley's genus, the additional metallocene would have to be <u>randomly</u> selected from the <u>same</u> genus that encompasses the first metallocene. Thus, Hawley provides no teaching of separating out two distinct and divergent classes of metallocenes from which separate metallocene species are selected, and then used to form a dual catalyst system.

In stark contrast, Applicants' claimed invention employs a <u>dual</u> metallocene catalyst system wherein the two metallocenes selected have *mutually exclusive* structures and properties. Thus, Applicants' two metallocenes are selected from two *mutually exclusive* genera based on specific features and having no overlap whatsoever. For example, the first metallocene requires the presence of at least one fluorenyl ligand, while the second metallocene requires two substituted cyclopentadienyl ligands. As compared to a single-metallocene control resin, the dual-metallocene resins from the Claim 1 catalyst exhibit several properties that differentiate them from the single-metallocene resins, including: 1) a more narrow polydispersity; 2) the lack

U.S. SERIAL NO.: 10/755,083 FILED: JANUARY 9, 2004

the very high end of the  $M_{\rm w}$ ; and 3) only about one third to one fourth the level of LCB as compared to the control single-metallocene resin (Specification, page 62).

Hawley is silent with respect to a catalyst composition comprising such first and second metallocenes. Respectfully, Hawley provides no teaching, guidance or direction as to how to select a second metallocene to form a dual metallocene system for polyolefin production. One of ordinary skill could not and would not look to Hawley to identify the requirements of Applicants' second metallocene that, when combined with Applicants' first metallocene, can provide polyolefin resins for extrusion coatings. In fact, no "second metallocene" is specifically disclosed in Hawley, therefore Hawley cannot teach or suggest Applicants' claimed invention.

Accordingly, Applicants maintain that each and every element of Applicant's dual metallocene catalyst system as set forth in Claim 1 is not found in the *Hawley*, nor is the identical invention shown in as complete detail in *Hawley* as in Claim 1. Because each element of Applicant's dual metallocene catalyst system is not found in *Hawley*, the elements of *Hawley* are not arranged as required by Applicants' Claim 1. Therefore Applicants maintain that Claims 1-10, 14-18, 28 and 29 are not anticipated by this reference.

Further, Applicants note that specific compounds are not necessarily anticipated by disclosure of a generic structure, even when the specific compounds are encompassed by that generic structure.<sup>1</sup> The patentability of a specific compound is affected by the extent and scope of possible compounds assembled from the generic structure and the disclosure of any preferred specific compounds.<sup>2</sup> Additionally, when a reference discloses a generic structure, the reference must provide direction for or an indication of why, from among the all the possible combinations, certain substituents are chosen to assemble a specific compound. If the reference fails to do so, the reference does not destroy the novelty of the specific compound.<sup>3</sup> Therefore, *Hawley* does not rise to the level of an anticipatory reference for Applicants' claimed invention.

Respectfully, for the reasons stated, Applicants request this rejection under 35 U.S.C. § 102(e) of Claims 1-10, 14-18, 28 and 29 be withdrawn and these claims be allowed.

<sup>&</sup>lt;sup>1</sup> See Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1262, 9 U.S.P.Q. 2d 1962, 1970 (Fed. Cir. 1989), see also In re Meyer, 599 F.2d 1026, 1031, 202 U.S.P.Q. 175, 179 (C.C.P.A. 1979)

<sup>&</sup>lt;sup>2</sup> Id., see also Ex Parte A, 17 U.S.P.Q.2d 1716, 1718 (Bd. Pat. App. & Int. 1990).

<sup>&</sup>lt;sup>3</sup> See *In re Baird* 16 F.3d 380, 383 (Fed. Cir. 1994).

AMENDMENT AND RESPONSE TO OFFICE ACTION DATED JULY 19, 2005

U.S. SERIAL NO.: 10/755,083 FILED: JANUARY 9, 2004

## **CONCLUSION**

In view of the foregoing amendment and remarks, Applicants respectfully assert that all claims are in condition for allowance and request that an early notice of allowance be issued.

No additional fees are believed due, however, the Commissioner is hereby authorized to charge any deficiencies which may be required, or credit any overpayment, to Deposit Account Number 09-0528, referencing matter number 51879.0596.2.

Early and favorable consideration is respectfully solicited. If the Examiner believes any informalities remain in the application that can be resolved by telephone interview or by an Examiner's Amendment, a telephone call to the undersigned attorney is respectfully requested.

Respectfully submitted,

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Atty. Docket No.:

C51757 0770 (51879.0596.2)

Client File No.:

210511US00